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Today I am submitting my objections to the transfer of Sprint licenses and assets to T-Mobile - opposing the merger of the two carriers.

Please note, my company, Console Enterprises, has prepared a petition to deny this merger. These objections and comments, in this filing, are my own and not related to or necessarily supported by my employer.

Objections to Merger

The single objection that I have to the Sprint / T-Mobile merger relates to device interoperability. With the reduction in carriers from four nationwide carriers, to three carriers, there are already long-standing concerns about how open devices will exist in the coming competitive environment.

These external events have left a cloud of concern about the future of 5G New Radio devices, and if they will operate similarly - particularly with the implementation of eSIM technology - to today's 4G LTE landscape.

The Landscape Today

Today carriers and innovative MVNO solutions can co-exist. The FCC has set clear rules regarding device unlocking, and CTIA - the wireless industry association - has wholly supported these rules on SIM card devices. However, the carriers permitting allowing all compatible devices, something in the public interest, leaves much to be desired.

For an initial instance, Dual SIM devices. It is concerning to this petitioner that not one Dual SIM device is capable of being activated today on Sprint (at the core of this merger) as well as on Verizon. Verizon has gone as far as to certify non-Verizon devices such as the American variant of the Sony Xperia XZ2 Compact, but not the standard XZ2 nor the international XZ2 Compact - particularly (and likely) due to the presence of Dual SIM technology on all other variants of the XZ2 platform.

Further Sprint has refused to activate devices such as the Axon 7, a device that its manufacturer specifically articulated to be compatible with Sprint's network - including supporting both CDMA2000, EVDO, and Sprint's unique trio of LTE bands (band 25, 26, and 41).

Some devices, like iPad and Pixel 2, offer an internal eSIM, and could conceivably perform Dual SIM functionality between the eSIM and the physical SIM. Unfortunately,

these efforts too, have largely been blocked - or possibly outright interfered with - by the carriers.

Prior to the announcement of this merger, the Department of Justice has announced a formal investigation into Verizon and AT&T regarding the implementation and interoperability of eSIM technology. The GSMA considers this so serious, that it has also halted articulation of eSIM standards until that investigation concludes.

Additionally, Verizon is currently the subject of formal complaints that are under investigation by the Commission. This includes *Nguyen v. Verizon*, Enforcement Bureau case 16-242. This petitioner has also submitted comment and provided additional information for that docket as well.

Reducing the number of national carriers from four carriers, to three carriers, underscores that issues like the situations noted above are likely to continue.

Sprint and T-Mobile Today

In general, T-Mobile has implemented acceptable and adequate SIM card rules for its network. The network operates and facilitates SIM cards and accepts most IMEIs. It is concerning that T-Mobile offers unlimited data and other services for smartphones and tablets - but does not always replicate this on hotspots and other innovative device types.

Some non-T-Mobile hotspots and devices are permitted to work on their standard smartphone data plans, whereas others are not - even from vendors that T-Mobile regularly works with. This leaves the landscape of what T-Mobile does, and does not permit, unclear - particularly as the phase in and out a variety plans that support unlimited tethering and hotspot usage on their 4G LTE network.

Sprint, on the other hand, has a frustrating and complex MEID/IMEI whitelisting system, that repurposed the SIM card as a standalone UICC, making device swaps and other service issues an extreme hassle. Typically to swap a device on Sprint today, requires either contacting customer service or web chat support. Even Sprint's own website is notorious for being unable to easily activate Sprint-certified devices. And importantly, Sprint is the only carrier today that refuses to activate non-certified phones and tablets.

This is in addition to the noted complexities and difficulties encountered with Sprint and consumer devices in the prior section of this objection.

The Combined Company

New T-Mobile could potentially align its 5G New Radio device policies with Sprint's restrictive 4G UICC and device policies today. This would be extremely hazardous to

device innovation, as the number of carriers that would accept non-certified or disruptive devices, would be reduced to two.

Further, Verizon is under no obligation to deploy 5G NR technologies on Upper Block C. It is possible, if not outright likely, that Verizon would join in paralleling New T-Mobile restrictive device acceptance and interoperability policies, on its 5G NR network.

The result of this would be denying non-certified devices (such as ones built by smaller, innovative startups) and adding layers of complexity to initiate device replacements (or swaps) - on all three remaining carriers.

This will stifle competition, prevent startups from innovating, and frustrate consumers - to the financial benefit of New T-Mobile, by restraining trade amongst its devices. It also will give New T-Mobile greater control over the home deck of devices. And also allow New T-Mobile to have sole steering control over new device types in AR, VR, Connected Car, and portable infotainment.

Again, on its own, one carrier may not seem significant, but as outlined in the scenario above, the reduction of four carriers to three, could end the ability for a startup or small business to create a new device - and ship it merely with FCC certification. T-Mobile and Sprint have done nothing to address this very-possible, if not likely outcome, in their merger proposal.

Potential Ways to Remediate

New T-Mobile could easily agree to open device and access rules that parallel the Upper Block C CFR (47 CFR § 27.16) - which Verizon has agreed to, and multiple other carriers participated in the auction thereof. These rules are the gold standard for how to properly operate a wireless network as an innovation hub.

Specifically, the Upper Block C CFR requires carriers to accept any compatible device, permit active SIM cards to be moved from one device to the next, and not blocking a device's activation due to a change in device type. Finally, it ensures that even if eSIM becomes pervasive, that the carrier will continue to offer SIM cards for those that prefer it, even on newer technologies.

Other options also exist, including incorporating elements of the above options into an open device access plan that would ensure New T-Mobile would be as open to innovation as the competitive forces of Sprint and T-Mobile as separate companies.

Conclusion

For the reasons outlined above, I respectfully object to the merger of Sprint and T-Mobile - as it is currently proposed. I ask the Commission to consider seeking relevant concessions from the two companies, in regards to device interoperability between carriers, and open device access for uncertified devices.

Finally, I thank the Commission for reading this extensive public comment and objection.